

## REMARKS/ARGUMENTS

This application has been carefully considered in light of the Examiner's Final Office Action dated July 12, 2007 (the "Final Office Action"). Reconsideration and allowance are respectfully requested in view of the following.

### ***Summary of Rejections***

Claims 1-2, 4-6, 10-20 and 29 were pending at the time of the Final Office Action.

Claims 12-20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 2, 4, 5, 6, 10, 11 and 29 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,974,237 to Shurmer et al. ("*Shurmer et al.*").

Claims 12-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Shurmer et al.*

### ***Summary of the Response***

Claims 1 and 12 are currently amended.

Claims 2, 13-16, 18, and 20 remain as originally submitted.

Claims 4-6, 10, 11, 17, 19, and 29 remain as previously presented.

Claims 3, 7-9, and 21-28 were previously canceled.

### ***Summary of Claims Pending***

Claims 1-2, 4-6, 10-20 and 29 are currently pending in this application.

Applicants hereby request further examination and reconsideration of the presently claimed application.

**Applicant Initiated Interview**

Applicants thank Examiner John Walsh for his time and consideration of the arguments presented in the telephone interview on August 21, 2007. In the interview, the limitations of claims 1 and 12 were discussed with regard to *Shurmer et al.* Examiner John Walsh suggested removing the terms “if” from the claims to more positively recite the claim limitations. In the interest of advancing prosecution, Applicants have herein amended the claims to remove the terms “if.” Examiner John Walsh indicated that it appeared that the amendment discussed above in conjunction with the arguments presented in the telephone interview might overcome the applied rejection, however, further consideration of *Shurmer et al.* may be required upon receiving this response. Further, Examiner John Walsh indicated that the amendment discussed above may require further search and/or consideration. A detailed discussion of the arguments presented in the telephone interview follows.

**35 U.S.C. Section 112 Rejections**

Claims 12-20 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 12 has been amended as suggested in the Final Office Action to correct the antecedent basis for the limitation in the claim.

**35 U.S.C. Section 102(b) Rejections**

Claims 1, 2, 4, 5, 6, 10, 11 and 29 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,974,237 to *Shurmer et al.*

Applicants respectfully traverse this rejection. According to MPEP § 2131, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Applicants submit that *Shurmer et al.*, fails to

teach each and every element as set forth in independent claim 1, and consequently fails to anticipate claim 1.

**Claim 1:**

Applicants' claim 1 has been amended herein to remove alleged optional "if" claim limitations.

Claim 1 now describes:

1. A service node for coupling a remote client to a network having at least one server, said service node comprising:
  - a) a gateway configured for connection to a network;
  - b) a switch configured for connection to a remote client;
  - c) a data routing system extending from said switch to said gateway, said switch, data routing system and gateway collectively forming a path, through said service node, configured for coupling said remote client to said network;
  - d) a bandwidth measurement device coupled to said gateway, said bandwidth measurement device configured for independently determining upload or download data transfer rates of data packets transferred between said remote client and said gateway, and for distinguishing the upload or download data transfer rate between the remote client and the gateway from the upload or download data transfer rate between the remote client and the network;
  - e) a measurement application resident on said bandwidth measurement device, said measurement application determining said upload or download data transfer rates for said bandwidth measurement device; and
  - f) an applet maintained by said measurement application suitable for download to said remote client; configured for independently determining upload or download data transfer rates between said remote client and said gateway, wherein, determining said upload data transfer rate between said remote client and said gateway, said downloaded applet generates said data packets originating at said remote client and, determining said download data transfer rate between said gateway and said remote client, said downloaded applet determines said download data transfer rate based upon an analysis of said data packets generated by said measurement application upon arrival at said remote client.

I. The limitations of Claim 1 require the applet to be downloaded to the client.

The Final Office Action indicated that the claims only required that the applet be “suitable for download,” but never actually recite the applet as being downloaded. Applicants respectfully traverse this assertion. Applicants note that Claim 1 recites, “said **downloaded** applet generates ...” and “said **downloaded** applet determines.” Therefore, it is clear from the limitations of Claim 1 that the applet is both suitable for download to said remote client and is downloaded to said client.

II. *Shurmer et al.* does not disclose that in determining said upload transfer rate said downloaded applet generates packets originating at the client.

Claim 1 recites, “determining said upload data transfer rate between said remote client and said gateway, said downloaded applet generates said data packets originating at said remote client.” To provide context for the limitation of “said data packets,” Applicants note that Claim 1 also recites, “determining upload ... data transfer rates of data packets transferred between said remote client and said gateway.”

The Final Office Action relied on disclosure of interrogation signals found in column 7, lines 10-14 of *Shurmer et al.* Applicants note that the interrogation signals are described to read data generated by the node equipment or to initiate a data signal response from the node equipment. That is, performance parameters already determined by the node equipment may be read from the node equipment using the interrogation signals. Also, the interrogation signals may cause the node equipment to initiate a determination of performance parameters of the node equipment.

Applicants respectfully submit that the interrogation signals are not downloaded to the node equipment. Applicants note that there does not appear to be any disclosure in *Shurmer et al.*

of downloading anything to the node equipment. Also, Applicants respectfully submit that the interrogation signals do not generate packets originating at the client. Rather, the interrogation signals simply establish communication that enables packets of data to be read from the node equipment.

III. *Shurmer et al.* does not disclose that in determining said download data transfer rate said downloaded applet performs an analysis of packets generated by said measurement application.

Claim 1 recites, “said downloaded applet determines said download data transfer rate based upon an analysis of said data packets generated by said measurement application upon arrival at said remote client.”

The Final Office Action relied on the disclosure of the interrogation signals found in column 7, lines 10-14 of *Shurmer et al.* described above. As noted above, it does not appear that *Shurmer et al.* provides any disclosure of downloading anything to the node equipment. Applicants respectfully submit that the interrogation signals of *Shurmer et al.* are not disclosed to perform any analysis of data packets. Further, looking to Fig. 1 of *Shurmer et al.*, Applicants respectfully submit that *Shurmer et al.* does not provide any disclosure of the node equipment 2 analyzing data packets generated by said monitoring apparatus 4 (interpreted as the bandwidth measurement device in the Final Office Action.)

IV. *Shurmer et al.* does not disclose determining an upload transfer rate or a download transfer rate.

The Final Office Action has relied on disclosure of column 9, line 12 of *Shurmer et al.* to teach measuring upload and download data transfer rates. Applicants note that column 9, line 12 discloses that in node equipment that are switches, performance parameters may include a rate of incoming cells and a rate of outgoing cells. Applicants respectfully submit that this is not

disclosure of an upload data transfer rate or a download data transfer rate between one node equipment and another node equipment. Rather, Applicants respectfully submit that this is merely a measure of throughput at a given node (or switch in this case) and is not a measure of a download data transfer rate or an upload data transfer rate between two nodes. For example, incoming cells may be received from multiple nodes, in which case the rate of incoming cells is not a measure of a download data transfer rate between two nodes. Similarly, outgoing cells may be sent to multiple nodes, in which case the rate of outgoing cells is not a measure of an upload data transfer rate between two nodes.

V. *Shurmer et al.* does not disclose an applet.

The Office Action dated January 30, 2007 stated that:

The claim term “applet” has been given the broadest reasonable interpretation that the examiner has interpreted as an application or program. *Shurmer et al.* discloses an application/program – ‘a program for operating the data monitoring apparatus’ (col 5, lines 39-40).

Applicants note that terms in the claims must be afforded their art-recognized accepted meaning consistent with applicant’s use of the term. MPEP 2173.05(a)(III) states:

“In applying the prior art, the claims should be construed to encompass all definitions that are consistent with applicant’s use of the term. See *Tex. Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1818 (Fed. Cir. 2002). It is appropriate to compare the meaning of terms given in technical dictionaries in order to ascertain the accepted meaning of a term in the art. In re Barr, 444 F.2d 588, 170 USPQ 330 (CCPA 1971). >See also MPEP § 2111.01.<”

Applicants respectfully submit that those skilled in the art will recognize that an applet is software or a program that operates in the context of another program. For example, Fig. 2 of the disclosure depicts the measurement applet 120 operates in the context of the web browser application 113. See also the description provided in paragraph 0026 of the disclosure.

VI. *Shurmer et al.* does not disclose the structure of the claimed service node.

Claim 1 recites, “a service node for coupling a remote client to a network,” and, “said switch, data routing system and gateway collectively forming a path, through said service node, configured for coupling said remote client to said network.” Therefore the structure of the service node claimed in Claim 1 requires all of said switch, data routing system, and gateway. Further, Claim 1 requires that the service node (comprising the structure described above) couple a remote client and a network via a path formed through the service node.

Applicants respectfully submit that *Shurmer et al.* does not disclose any such structure. While *Shurmer et al.* does disclose various ones of the components of Claim 1, *Shurmer et al.* does not provide any disclosure of said components structured and operating as claimed. For example, *Shurmer et al.* discloses that the node elements 2 may be a gateway or a switch, that a monitoring apparatus 4 may monitor each individual node element 2, a communications network 1; a client processor station 30, etc. *Shurmer et al.* does not disclose that a group of node elements 2 including a gateway, a switch, and a data routing system form a path that couple the client processor station 30 to the network 1.

For at least the reasons established above in sections I-VI, Applicants respectfully submit that independent Claim 1 is not anticipated by *Shurmer et al.* and respectfully request allowance of this claim.

Dependent Claims 2, 4, 5, 6, 10, 11 and 29 depend directly or indirectly from independent Claim 1 and incorporate all of the limitations thereof. Accordingly, for at least the reasons established in sections I-VI above, Applicants respectfully submit that Claims 2, 4, 5, 6, 10, 11 and 29 are not anticipated by *Shurmer et al.* and respectfully request allowance of these claims.

**The 35 U.S.C. Section 103(a) Rejections**

Claims 12-20 stand rejected as being unpatentable over U.S. Patent No. 5,974,237 to *Shurmer et al.*

According to MPEP § 2142, three basic criteria must be met to establish a *prima facie* case of obviousness:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

Similarly, the fact that the Examiner has the burden of proof with respect to the elements of the *prima facie* case of obviousness is also well defined in MPEP § 2142:

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

**Claim 12:**

Applicants' claim 12 has been amended herein to remove alleged optional "if" claim limitations. Independent claim 12 has also been amended and now provides:

12. An intranet for providing on-demand Internet access to subscribers, said intranet comprising:

- a) a service node; and
- b) a plurality of subscriber terminals, each one of said plurality of subscriber terminals coupled to said service node by a corresponding xDSL line;
- c) said service node comprising:

- i. a switch coupled to each one of said plurality of xDSL lines;
  - ii. a gateway coupled to the Internet;
  - iii. a data routing system extending from said switch to said gateway, said switch data routing system and gateway collectively forming a path, through said service node, for coupling each one of said plurality of subscriber terminals to the Internet; and
  - iv. a bandwidth measurement device coupled to said path, said bandwidth measurement device configured for independently determining upload or download data transfer rates between said gateway and requesting ones of said plurality of subscriber terminals which access said bandwidth measurement device, and for distinguishing the upload or download data transfer rate between the client and said gateway from the upload or download data transfer rate between the said requesting ones of said subscriber terminals and the Internet;
- d) a measurement application resident on said bandwidth measurement device, said measurement application determining said upload or download data transfer rates for said bandwidth measurement device; and
- e) an applet maintained by said measurement application suitable for download to said requesting ones of said subscriber terminals; configured for independently determining upload or download data transfer rates for said requesting ones of said subscriber terminals, wherein, determining said upload data transfer rate between said requesting ones of said subscriber terminals and said gateway, said downloaded applet generates said data packets originating at said requesting ones of said subscriber terminals and, determining said download data transfer rate between said Internet and said requesting ones of said subscriber terminals, said downloaded applet determines said download data transfer rate based upon an analysis of said data packets generated by said measurement application upon arrival at said requesting ones of said subscriber terminals.

Applicants respectfully submit that the cited references do not establish a *prima facie* case of obviousness as to the pending claims because the cited references fail to teach or suggest all of the claim limitations.

Claim 12 includes limitations substantially similar to the limitations discussed in sections I-VI above. For at least the reasons established above in sections I-VI, Applicants respectfully submit that independent Claim 12 is not taught or suggested by *Shurmer et al.* and respectfully request allowance of this claim.

VII. *Shurmer et al.* does not teach or suggest determining upload or download data transfer rates between said gateway and requesting ones of said plurality of subscriber terminals.

The Final Office Action rejected the limitations of Claim 12 through reference to the rejection of Claim 1. Applicants respectfully submit that the Final Office Action did not specifically address the limitation of “**requesting** ones of said plurality of subscriber terminals.” The limitations of Claim 12 require that the determination of upload or download data transfer rates is performed based on a **request** from a subscriber terminal. Applicants respectfully submit that *Shurmer et al.* does not teach or suggest that any of the node equipment 2 request a determination of an upload or download data transfer rate. Rather, *Shurmer et al.* discloses that the monitoring apparatus 4 requests that the node equipment provide their performance parameters, such as a rate of incoming cells and a rate of outgoing cells.

For at least the reasons established above in sections I-VII, Applicants respectfully submit that independent Claim 12 is not taught or suggested by *Shurmer et al.* and respectfully request allowance of this claim.

Dependent Claims 13-20 depend directly or indirectly from independent Claim 12 and incorporate all of the limitations thereof. Accordingly, for at least the reasons established in sections I-VII above, Applicants respectfully submit that Claims 13-20 are not taught or suggested by *Shurmer et al.* and respectfully request allowance of these claims.

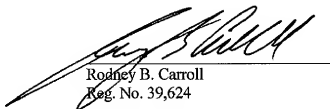
**CONCLUSION**

Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections and objections is respectfully requested by Applicants. No new matter is introduced by way of the amendment. It is believed that each ground of rejection raised in the Final Office Action dated July 12, 2007 has been fully addressed. If any fee is due as a result of the filing of this paper, please appropriately charge such fee to Deposit Account No. 21-0765, Sprint. If a petition for extension of time is necessary in order for this paper to be deemed timely filed, please consider this a petition therefore.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,

Date: 8-3-07



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